Data were obtained via self-administered questionnaire and telephone using trained interviewers. QOL domains used were those identified by the OAB-q instrument developed by Coyne et al. All profile attributes had two levels: high/present and low/not present. **RESULTS:** The linear fixed-effects model resulted in the following part-worth coefficients for the five attributes of interest: insurance coverage, 34.17; sleep, 23.55; concern, 19.59; social, 19.28; coping, 15.61. Also reported is an analysis of demographic variables with respect to symptom severity and QOL. **CONCLUSIONS:** When deciding to treat OAB symptoms with prescription medications, patients place the most importance on prescription drug insurance coverage. QOL domains follow insurance in this order: sleep disturbances, symptom concern, social disturbances, and coping.

URINARY/KIDNEY DISEASES/DISORDERS

URINARY/KIDNEY DISEASES/DISORDERS—Health Policy Studies

PUK11

PATIENT PERSISTENCY WITH MEDICATIONS FOR OVERACTIVE BLADDER

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OBJECTIVES: To assess patient persistency in maintaining treatment for Overactive Bladder (OAB). **METHODS:** Patients initiating therapy on oxybutynin or tolterodine, immediate or extended release, were tracked for 12-months, using a retail pharmacy database. Five persistency classification categories were created to evaluate persistency as follows: on therapy, discontinued/no switch, discontinued/switched to one of the other previously listed medications, reinitiated initial therapy, and off therapy. Measurements included tracking the percent of patients within each persistency classification category, total therapy days, and prescriptions dispensed for all medications. **RESULTS:** The percentage of patients that discontinued their current therapy and did not switch to another OAB therapy was 46.9% at month three. By month four, more than half of all patients were off therapy (55.4%). The percentage of patients off therapy increased each month and reached 81.6% by the end of twelve months. The percentage of patients that were switched to another OAB medication did not exceed 3% in any month, nor did the percentage of patients who reinitiated their initial therapy surpass 3% in any month. The mean length of therapy was approximately 86 days, with an average days supply of 30. Approximately half of all patients were dispensed only one medication during the 12-month period. **CONCLUSIONS:** Patient persistency with any currently marketed medications for OAB remains poor, with less than 20% of study patients remaining on therapy after 1 year.

URINARY/KIDNEY DISEASES/DISORDERS

URINARY/KIDNEY DISEASES/DISORDERS—Methods

PUK12

PROSPECTIVE URINARY INCONTINENCE RESEARCH (PURE): DESCRIPTION OF STUDY, RATIONAL, DESIGN AND METHODOLOGY

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OBJECTIVES: The objectives of PURE are to understand the direct cost of urinary incontinence (UI); describe the impact of UI on health-related quality of life (HRQOL); and describe the treatment patterns for women with UI in Europe in an outpatient setting. **METHODS:** PURE is an ongoing, prospective, observational study. More than 9000 patients will be recruited in 13 European countries. The participating investigators are primary care physicians and specialists (urologists, gynaecologists, geriatricians). The data will be prospectively collected at baseline and at 2 points over a 6-month period. Assessments include health care resource utilisation and treatments to derive direct medical costs of UI care and describe the treatment patterns, as well as symptoms and severity of UI and impact of UI on patients' lives. Baseline evaluation will additionally include demographics, medical history, the assessment of HRQOL and a retrospective data collection on health care resource utilisation in the previous 12 months. **RESULTS:** By considering all the 10 priority research areas on the economics of UI identified by the 2nd international consultation on incontinence, PURE provides a unique opportunity to assess the direct medical costs for UI care in women across Europe. This will give insights to the economic burden from the perspective of the national health care systems, as well as from the patient, and will allow comparisons of treatment patterns between countries in the light of different health care systems and access to care. To our knowledge this is the first study undertaken in an outpatient setting to investigate the economic and human impact of UI in Europe. **CONCLUSIONS:** PURE will address relevant clinical, economic and policy research questions and will provide large-scale, comparative, real-world information on the treatment and burden of UI across Europe; data currently missing from the European literature but needed to guide effective health policy.

PUK13

VALIDATION OF AUTOMATED DATABASE ALGORITHMS TO IDENTIFY HOSPITAL-ACQUIRED ACUTE RENAL FAILURE

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OBJECTIVES: Acute renal failure (ARF) is a prevalent and often preventable adverse drug event. Automated methods for ARF identification facilitate quality improvement and outcome research, but traditional reliance on ICD9 codes has been shown to underestimate the incidence. This study aimed to develop and validate automated algorithms for the identification of hospital-acquired ARF. **METHODS:** A panel (nephrologist, internist, clinical pharmacy specialist, pharmacoepidemiologist, database analyst) defined 3 algorithms based on existing literature and available automated data: 1) 50% increase of serum creatinine (SCr) within 3 days; 2) 50% SCr decrease between peak and discharge; and 3) ICD9 584.•• and charge code for dialysis. Each algorithm was linked (temporally and proximately) to drug exposure (aminoglycosides, amphotericin, cyclosporine, tacrolimus, NSAIDs, or radiocontrast). Discharges with hospital days <2 or ESRD (dialysis in first 3 days of admission) were excluded. Algorithms were applied to the laboratory and administrative databases of a large teaching hospital including discharges between July 1, 2001 and June 30, 2002 (n = 20,639 or 10,536 with nephrotoxic drugs). Senior nephrology fellows to verify the algorithms reviewed a random sample of positive screened discharges. A random 20% of these were re-reviewed

to assess inter-rater reliability. **RESULTS:** The 3 algorithms found 725 unique discharges (incidence 6.9%) with ARF. Algorithm 1 identified 585 cases, 2 and 3 identified 264 and 72. Of these, a random sample of 99 charts (stratified by algorithm) was reviewed. Reviewers anonymously confirmed ARF in 87 (88%) of 99 charts. The flagged association with the specified nephrotoxin was confirmed in 48 (55%) cases. Positive predictive values for each algorithm were comparable, 88%, 93%, and 87% respectively, while estimated sensitivity (78%, 47%, 15%) and specificity (25%, 75%, 83%) varied. **CONCLUSIONS:** The algorithms offer an excellent tool for outcomes research. While each is valid in correctly identifying ARF, differences exist in sensitivity and specificity. Underlying study questions (e.g., desired ARF severity) should determine which algorithm is used.

HEALTH POLICY

HEALTH POLICY—Handguns, Fireworks & Poisons

PHP1

A COST MINIMIZATION ANALYSIS OF FOMEPIZOLE VERSUS ETHANOL WITH OR WITHOUT HEMODIALYSIS IN THE ACUTE MANAGEMENT OF METHANOL OR ETHYLENE-GLYCOL POISONING

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OBJECTIVES: To evaluate from the public payer point of view savings in the acute management of methanol or ethylene glycol poisoning when replacing ethanol by fomepizole as first line antidote therapy. **METHODS:** A decision tree model based on a expert consensus process was built, using DATA TM Tree Age 4.0, to predict the average additional costs per patient due to the treatment of side effects of each antidote in 8 situations (branches). The side effects were related to the following issues: depression of the central nervous system, pancreatitis, and hemodialysis complications. For each of the five countries (Belgium, France, Italy, Ireland, Norway) one senior expert in toxicology and intensive care provided: 1) An estimation of the probability of occurrence of each side effect, and 2) A value (real price) of each relevant treatment of each side effect. The costs were given as per-S2 2003 value. As the time frame of the study was the discharge of hospital, no discount rate was calculated. **RESULTS:** In each of the five countries, the cost of side effect management was cheaper in the "fomepizole" situation than in the "ethanol" situation. For methanol poisoning, the savings in the fomepizole group ranged from 724€ to 1667€, 22.3% to 88.7% in proportion. For ethylene-glycol poisoning the saving in the fomepizole group ranged from 251€ to 2847€, 26.3% to 76.9% in proportion. **CONCLUSION:** Fomepizole, when used as a first line antidote therapy represents a source of potential savings in the management of side effects: Up to 1667€ for methanol poisoning and up to 2847 € for ethylene glycol poisoning.

PHP2

HOSPITALIZATIONS FOR INJURIES FROM FIREWORKS: RESOURCE USE AND COSTS

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OBJECTIVE: Each year in the U.S., particularly around holidays like July 4th, injuries occur from the use of fireworks. Most injuries can be treated in Emergency Departments, but some are serious enough to require hospitalization. This study examines admissions resulting from fireworks-related injuries and estimates the resulting hospital cost. **METHODS:** Cases were identified using ICD-9 diagnosis and E-codes. Hospital costs were developed based on discharge data from 59 hospitals in seven states from 2000. Cost estimates include accommodation and ancillary services, reported in 2003 US$. Charges were adjusted using a 0.61 cost-to-charge ratio and the U.S. Consumer Price Index's annual medical care component. **RESULTS:** Of 98 cases identified, 90% were male. Admissions occurring in July (35%), June (15%) and January (16%) accounted for two-thirds of hospitalizations. Mean age was 25 years (median: 18, range: 5–75), 40% were under 15 years. Most (78%) were admitted via the Emergency Department and 40% stayed in ICU. Principal diagnoses revealed that 41% were admitted primarily for fracture or open wound of an extremity; second or third degree burns (25%) or eye injuries (17%). Roughly, one third (34%) required amputation of a finger or thumb. No fatalities were reported. Mean length of stay was 4 days (median: 2, range: 1–41). Mean cost per stay was $15,590 (median: $7150, range: $923–$235,213). Cumulative cost for all cases was approximately $1.4 million. At discharge 94% went home (4% with home care) and the remaining 6% were transferred to sub-acute facilities. **CONCLUSIONS:** Most of the fireworks-related injuries requiring hospital level of care occurred in children and teenagers. Some injuries can be potentially life altering because of amputation or loss of an eye. These results bring attention to the need for increased education, particularly prior to holidays, of children and their parents about the dangers and consequences of using fireworks.

PHP3

HANDGUN INJURIES TO CHILDREN AND TEENS RESULTING IN HOSPITALIZATION: CIRCUMSTANCES, RESOURCE USE AND COSTS

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OBJECTIVES: To identify youths (infants –19 years) admitted for a handgun-related injury and associated resource use and costs. **METHODS:** Hospital data for discharges in 2000 from 7 states were examined using ICD-9 diagnosis and E-codes (E922.0, E955.0, E965.0) to identify type and circumstance (i.e., assault, accident, self-inflicted) of injury along with demographics, costs, length of stay (LOS), case fatality rate (CFR) and disposition. Charges were adjusted using a 0.61 cost-to-charge ratio and the annual medical care component of the U.S. Consumer Price Index. Cost estimates include all accommodations and ancillary services, reported in 2003 US$. **RESULTS:** Of the 2498 handgun-related admissions identified, 22% involved a child or teen (n = 541; males = 86%). Assaults were noted in 67% of cases, followed by accidents (27%) and self-inflicted (6%) injuries. Most (86%) were admitted via the Emergency Department. Mean age was 16 years, but most (53%) were 18–19 years; 6% were under 12 years. On average, those with accident-related injuries were younger (mean = 14 years). The CFR was 4% for assault-related cases, 8% for accidental injuries. More than half (57%) of those with self-inflicted injuries died as inpatients. Head injuries comprised 70% of self-inflicted injuries. Extremity injuries were coded most often in accidental shootings (54%); trunk injuries (45%) in assaults. Mean LOS for handgun injuries was 5 days (median: 3, range: 1–53). Mean cost per stay was $17,000 (median: $10,500, range: $560–$1.2 million). Cumulative cost for all cases was $12.8 million. Among survivors, 89% went home (8% with home care), 5% required subacute inpatient care, 2% left AMA and 4% to an institution (e.g., prison). **CONCLUSIONS:** Most hospitalizations were assault-related. Intentional injuries were seen least often, but were the